WEB-BASED STUDENT ATTENDANCE INFORMATION SYSTEM AT
MTS AL-ISHLAH PANAMBANGAN

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ABSTRACT

MTS Al-Ishlah Panambangan is one of the schools located in Mining, Sedong, Cirebon Regency, West Java 45189 As an educational institution, MTs AL ISHLAH Panambangan Harapan is responsive to these technological developments. With the support of human resources, this madrassa is ready to compete with other schools in public information services. Web Information Technology in particular, has become a means for MTs AL ISHLAH Panambangan to provide fast, clear, and accountable information services. From this service, schools are ready to accept suggestions from all parties which can finally answer the needs of the community. In this research paper, the author conducts an analysis of the current student attendance system. The current attendance system apparently still lacks accurate attendance data for students, because students still use conventional systems and are not carried out consistently which in the end the results of student attendance recapitulation often experience loss. To solve problems like this, the author intends to try to handle the attendance process by designing a web-based attendance information system.

Keywords: Web, Information System, Student

INTRODUCTION

Currently the need for fast information is very important, especially with the development of information technology in all fields, the use of technology in processing information is absolute. One area that is strongly influenced by the development of information technology is education. The public can get information about education anywhere and anytime easily and quickly through the website.

The development of information and communication technology greatly affects today's civilization, which allows jobs within an organization to be completed quickly, accurately and efficiently. One example is the student attendance system. The use of attendance means that there is discipline at the place concerned and assessing the system in that place is of good quality, thus this attendance also helps a good assessment for MTS Al-Ishlah Panambangan.

The rapid development of information technology, of course, will greatly assist humans in conveying information, considering that everything that humans do will be easier with the development of information technology, as a result of the progress of the system in life, information plays an important role so that what is needed should be obtained easily. fast, accurate and easy.

Writing and the desire to design an information system so that all administration is carried out in a computerized system designed using PHP and MYSQL based on a website The system designed serves to assist the process of web-based student attendance information
system at MTS Al-Ishlah Panambangan. With a computerized system, the attendance system at MTS Al-Ishlah Panambangan manages its data using a computerized system.

The author took the object of research at MTS Al-Ishlah Panambangan by conducting observations and interviews, with a total of 219 students and a total of 16 teachers. The author encountered one of the cases of student delinquency who did not attend school without explanation or truant. Students do not attend class without explanation, even though they say goodbye to their parents at home to go to school. Parents of students will not know firsthand events like this. Parents of students can only know the absence of students only at certain times, such as the time of receipt of learning outcomes in each semester. Moreover, with the attendance system that is still manual, namely by recording daily and recapitulating attendance data, the school can only provide student attendance results at the time of receipt of learning outcomes at the end of each semester.

The attendance system that runs at MTS Al-Ishlah Panambangan currently uses written attendance which is carried out every day. Student attendance data is also not completely correct because the recording system still uses a recap book of attendance results every day. By recording student attendance every lesson according to schedule, then the attendance results are submitted to the student section to be recapitulated according to each class. This system takes a long time to collect attendance, and the cost is quite large to provide paper and print attendance media. In the recording of attendance data, there are also frequent errors in the results of data recording by officers because the recording is done manually.

Based on the description above, the author's goal is to make a web-based student attendance information system program design. Therefore, the author made this final project writing material with the title "Web-Based Student Attendance Information System at MTS Al-Ishlah Panambangan". The benefits of research on a web-based student attendance information system is to find out the extent of the ability of this application in helping teachers to recap student attendance and helping parents to know the presence of their children.

RESEARCH METHOD

Based on this research method, the method used for software development is to use object-oriented methods. According to (Hasugian & Shidiq, 2012) the concepts in the object-oriented method are activity diagrams, input document analysis, output document analysis, use case diagrams, package diagrams, class diagrams and sequence diagrams. For database design (database) using Entity Relationship Diagram (ERD), includes the process of making ER diagrams, Transforming ER diagrams to Logical Record Structure (LRS), Tables or Relationships, Database specifications:

1. Literature study, namely collecting information and understanding materials related to attendance information systems.
2. The interview is a question and answer activity directly or indirectly to resource persons related to the problems and needs of the attendance information system.
3. System analysis is to describe information into a design for the formation of an attendance information system.
4. Implementation is the application of a system that has been designed in such a way, including what needs are needed for the realization of a complex system.
RESULT AND DISCUSSION
SYSTEM DESIGN AND IMPLEMENTATION
Context Diagrams
Context diagram is a diagram that consists of a process and describes the scope of a system. Context diagram is the highest level of data flow diagrams that describe all inputs to the system or outputs from the system. The context diagram will give you an idea of the whole system.

Entity Relationship Diagram (ERD)
Entity Relationship Diagram (ERD) is a model to explain the relationship between data in the database based on basic data objects that have a relationship.

Software Requirements Analysis
In the process of making a WEB-Based Student Attendance Information System, all we need to do is install a special tool called Composer. Composer is a dependency manager that will manage a library that we will inject into our project. Laravel itself refers to the MVC software architecture, namely model, view, controller. The model is a layer of software that handles data in the database, such as query, insert, update, delete operations. In Laravel the Model itself is represented in the form of ORM (Object Relational Mapping), which is a technique that represents the database in an Object. Using PHP Version 8.0.1 and above.

Hardware Requirements Analysis
The hardware needed to support the Web-Based Student Attendance Information System process includes:

a. A computer that functions as a website server, which is supported by Apache Webserver software.
b. Internet network where there are clients who will access data from the server computer.
c. Several mobile phones that have been netted with the local network of the relevant agencies.

Personnel Needs
Functional analysis is an analysis that involves key personnel related to the system to be designed. Functional analysis of data provides an overview of the activities or functions performed by actors or key personnel to the system. Human resource requirements or users are people who will be involved in making system design, including:

a. The person in charge and responsible for designing, recommending software selection.
b. The parties who use and manage this system are the admin, warehouse, production, and leadership sections.

System Operation
An operating system is a type of software whose job it is to control and manage hardware and basic system operations, including application software. Operating system created. WEB-Based Student Attendance Information System is divided into three processes, namely Admin, Teacher, and Student. The attendance process is still run by the administrator, because it prevents teachers and students from cheating during the attendance input process itself. The following is how the system operates.

Teacher Absence Process
a. When the teacher arrives, he immediately rushes to take the absent paper from the staff in charge of attending to the teacher and inputting it into the system
b. The teacher fills out the absent form and returns it to the staff
c. After that the teacher can check into the application system
d. Turn on your computer/laptop or cellphone
e. Connect your computer/laptop or cellphone with wifi or cellular data
f. Open the attendance website link
g. Log in to the attendance website with the teacher user
h. Login first
i. The teacher can see the results of the absences entered by the staff

**Student Absence Process**

a. When students arrive, they immediately rush to take attendance papers from the staff in charge of attending students and inputting them into the system
b. Students fill out the absent form and return it to the staff
c. After that the teacher can check into the application system
d. Turn on your computer/laptop or cellphone
e. Connect your computer/laptop or cellphone with wifi or cellular data
f. Open the attendance website link
g. Log in to the attendance website with the student user
h. Login first
i. Students can see the absences entered by the staff

**Admin Process**

a. Turn on your cellphone/computer.
b. Connect Mobile/Computer with wifi or cellular data.
c. Open the mobile/computer attendance website.
d. Login with the user "admin" who is in charge of entering attendance data
e. Input attendance of teachers and students who have previously filled out the absent form.
f. After entering attendance, the data has been sent and stored in the application

**With the above scheme it can be concluded that:**

a. Teachers and students of MTs Al-Ishlah Panambangan cannot change attendance data so that the attendance process can run well and avoid cheating
b. Staff or administration department can quickly recap teacher and student absenteeism because it is already available in the system
c. Reduce attendance hardcopy files that are prone to loss
d. Teachers and students can carry out the attendance process anywhere so as to facilitate the attendance process, especially for teachers and students who are unable to attend
e. With the teacher taking attendance and filling in the absence of teaching hours, it will have an impact on the income or salary that the teacher will receive
f. With the absence of teachers, it can also improve careers as consideration for promotions
g. In the process of recapitulation of teacher attendance reports and teaching hours attendance will not experience errors, so that the results of the report are truly pure from the absent process that has been running.

**CONCLUSION**

Based on the results of research and discussion that have been described in previous chapters, the following conclusions can be drawn:
5.1.1. The attendance process carried out at MTS Al-Ishlah still uses the manual method so that it often loses data during attendance recapitulation. With the creation of this student attendance information system, it can help performance in the attendance process to be better because it makes it more effective and efficient.

Judging from the conclusions described above, the absence of teachers and students at MTS Al-Ishlah Panambangan is still very less than perfect. If anyone is interested in developing this system, the suggestions are as follows:

This system is admittedly far from perfect, there are still many things that need to be refined again for this research, it is hoped that in the future this system can be developed again by the campus and the school.

In order for the web-based student attendance system to be achieved optimally, the teacher must pay attention to the procedures that have been made, so that the use of the web-based student attendance system can run correctly

Hopefully the conclusions and suggestions that the author provides will be taken into consideration in developing a better and better system. Because seeing from the increasingly rapid development of technology, inevitably we must continue to follow these technological changes in order to continue to improve the quality of schools, so I hope this research can be useful in the future.

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